# Colin X. Schuh

colin.schuh@uky.edu | (859) 620-7866 | github.com/colins-uky

#### **Objective**

Obtain an internship at a first-to-market, forward-thinking, innovative company where I can be part of an engaging, practical, and collaborative team focused on innovative product development and implementation.

#### Education



## Highlights

# University of Kentucky College of Engineering - Lexington, KY BS Computer Science & Mathematics

- GPA: 3.2
- Expected graduation in May 2024
- Relevant Coursework: Data structures, Algorithms, Web development, Linear algebra, Probability theory, Statistics, Discrete math
- Experience with new product design and development
- Unix command line proficiency
- Version control using git
- Front-End web app development with ReactJS & NextJS
- Robot Operating System (ROS)
- Image processing and machine vision using OpenCV with Python
- Microsoft Office Suite proficiency
- Programming Languages: Python, JavaScript, C, C++, PHP
- Technical Skills: HTML/CSS, ReactJS, NextJS, mySQL

#### **Extracurriculars**



# Kentucky Organization of Robotics & Automation (KORA)

(August 2022-Present)

#### Member

- Design and build autonomous and user-controlled intelligent robots to compete in competitions.
- Competed in NASA Lunabotics 2023 competition.
- Developed a lunar rover mining robot capable of mining a payload 30cm (~12in) under the surface for NASA Lunabotics.
- Designed and created an autonomous collision avoidance system for our rover using the OpenCV Python library for image processing and depth-map data from an intel realsense depth camera.
- Created a webpage for status updates and manual control of our rover using an apache server running on the robot and JavaScript
  websockets to communicate.
- Created a webpage for Engineering Day 2023 (E-Day) robot mini-game.
- Volunteer with other club members to referee First Robotics competition in Lexington, KY.
- Use Robot Operating System (ROS) to send input and receive data from a robot.
- Demonstrated strong teamwork, communication, and problem-solving skills in various projects.
- Developed technical skills in areas such as mechanical design, electronics, and control systems.
- Gained experience in project management, budgeting, and resource allocation to successfully deliver projects on time and within budget.



## **UKY Esports Club**

(September 2020-Present)

#### Member

- Worked collaboratively with teammates to develop winning strategies.
- Competed in various intercollegiate esports leagues and tournaments for prizes.
- Organized and facilitated esports matches and practices.
- Contributed to the recruitment efforts to grow the club's membership.
- Gained experience in teamwork, communication, and leadership skills through the club's activities.
- Developed a strong understanding of the esports industry and its potential for growth and innovation.

# Activities & Community Service

#### Volunteer, Engineering Day 2023, (2/25/2023)

- Assisted in organizing and facilitating hands-on engineering activities for elementary and middle school students.
- Introduced students to fundamental concepts in engineering, including basic programming and robotics.
- Communicated effectively with students, teachers, and other volunteers to ensure that everyone had a positive experience and gained a better understanding of the field of engineering.
- Coordinated with other volunteers to manage logistics and maintain a safe and organized learning environment for all participants.

#### Volunteer Referee, First Robotics Competition, (2/11/2023)

- Judged and scored matches for high school robotics teams at a regional competition, ensuring that teams followed competition rules and regulations.
- Communicated effectively with other referees and competition organizers to ensure smooth and fair competition operations.
- Maintained accurate records of team scores in real time as the competition is ongoing.

# Member, Smile Club, (August 2022-Present)

- Participated actively in a suicide prevention and awareness club, dedicating time to promote mental health education and support for peers in distress.
- Collaborated with other members to organize and facilitate events, such as guest speakers, workshops, and outreach campaigns, aimed at reducing stigma and raising awareness about suicide prevention resources.
- Made minor adjustments to the club website such as adding images and videos, and hyperlinks to purchase items.